

PENDING CLAIMS

Claims 1-4 (Cancelled).

5. (Currently Amended) A method for storing sets of signals in a compressed format comprising ~~sequentially:~~

providing first and second memory devices;

dynamically partitioning the second memory device into

a first memory area for storing in the compressed format sets of signals previously recorded,

a second memory area for storing in a compressed format sets of signals previously recorded that have been compressed from an uncompressed set of signals previously recorded and that are still stored in an uncompressed format in another memory area of the second memory device,

a third memory area for storing, temporarily, in the uncompressed format the sets of signals stored in the compressed format in the second memory area, and

a fourth memory area which is a free area for storing sets of signals previously recorded without regard to format;

transferring a plurality of the sets of signals previously recorded in ~~an~~the uncompressed format and stored in ~~a~~the first memory device in ~~an~~the uncompressed format to ~~a~~the third memory area of the second memory device where the sets of signals are stored in ~~an~~the uncompressed format;

retrieving one set of signals at a time in ~~an~~the uncompressed format ~~at a time~~ from the third memory area of the second memory device ~~and;~~

compressing each set of signals that has been transferred to the second memory device in ~~an~~the uncompressed format into a set of signals in ~~a~~the compressed format, one set of signals at a time, ~~in the second memory device;~~

storing each set of signals compressed into ~~a~~the compressed format in the second memory area of the second memory device ~~or in another memory device;~~ and

making available, for future storage, memory space of the third memory area in the second memory device occupied by a set of signals in the uncompressed format, after compressing that set of signals into ~~a~~the compressed format by transferring that memory space from the third memory area to the fourth memory area.

Claims 6 - 8 (Cancelled).

9. (Currently Amended) The method of claim 8, wherein the storing in the third memory area of the second memory device in ~~an~~the uncompressed format of the sets of signals transferred to the second memory device in ~~an~~the uncompressed format and the storing of each set of signals in ~~a~~the compressed format in the first memory area of the second memory device comprise storing the respective sets of signals in ~~an~~the uncompressed format and in ~~a~~the compressed format in a computer readable disc.

10. (Currently Amended) The method of claim 5, wherein the storing in the third memory area of the second memory device in ~~an~~the uncompressed format of the sets of signals transferred to the second memory device in ~~an~~the uncompressed format and the storing of each set of signals in ~~a~~the compressed format in the first memory area of the second memory device comprise storing the respective sets of signals in ~~an~~the uncompressed format and in ~~a~~the compressed format in different memory devices.

11. (Currently Amended) The method of claim 5, wherein storing in the third memory area of the second memory in ~~an~~the uncompressed format the sets of signals transferred to the second memory device in ~~an~~the uncompressed format comprises storing each set of signals in ~~an~~the uncompressed format in a computer readable electronic memory, and

the storing of each set of signals in ~~a~~the compressed format comprises storing each set of signals in ~~a~~the compressed format in a computer readable hard disc.

12. (Previously Presented) The method of claim 5 wherein the compressing comprises compressing the sets of signals to MP3 format.

13. (Previously Presented) The method of claim 12 wherein the sets of signals represent audio.

14. (Previously Presented) The method of claim 5 wherein the sets of signals represent segments of audio.

Claims 15 and 16 (Cancelled).

17. (Currently Amended) A method for storing ~~sets of~~ previously recorded sets of digital signals in a compressed format in a computer readable disc storage device, each set of digital signals representing a segment of audio, the method comprising, ~~sequentially~~:

providing first and second storage devices;

dynamically partitioning the second storage device into

a first memory area for storing in the compressed format sets of digital signals previously recorded,

a second memory area for storing in a compressed format sets of digital signals previously recorded that have been compressed from an uncompressed set of digital signals previously recorded and that are still stored in an uncompressed format in another memory area of the second storage device,

a third memory area for storing, temporarily, in the uncompressed format the sets of digital signals stored in the compressed format in the second memory area,
and

a fourth memory area which is a free area for storing sets of digital signals previously recorded without regard to format;

transferring ~~one~~ a plurality of sets of digital signals previously recorded in ~~an~~the uncompressed format from ~~a~~the first storage device to ~~a~~the third memory area of the second storage device where the sets of digital signals are stored in ~~an~~the uncompressed format;

retrieving each set of digital signals in ~~an~~the uncompressed format, ~~only~~ one set of digital signals at a time, in ~~an~~the uncompressed format ~~at a time~~, from the third memory area of the second storage device;

compressing the set of digital signals in ~~an~~the uncompressed format that is retrieved, from the third memory area into a set of digital signals in ~~a~~the compressed format, one set of digital signals ~~in a compressed format~~ at a time;

storing the set of digital signals compressed into ~~a~~the compressed format in the second memory area of the second storage device; and

making available, for future storage, memory space of the third memory area in the second storage device in which the set of digital signals in the uncompressed format was stored, after that set of digital signals has been compressed into ~~a~~the compressed format by transferring that memory space from the third memory area to the fourth memory area.

Claim 18 (Cancelled).

19. (Previously Presented) The method of claim 17 wherein the compressing comprises compressing the set of digital signals to MP3 format.

Claims 20 and 21 (Cancelled).

22. (Currently Amended) A method for storing previously recorded sets of audio tracks in a compressed format in at least one memory device and for later

retrieving the set of audio tracks in ~~a~~the compressed format, and for converting the set of audio tracks retrieved in ~~a~~the compressed format into a set of signals in an uncompressed format suitable to be played to sound the respective audio-tracks, the method comprising:

transferring a plurality of sets of audio tracks in ~~a~~the uncompressed format from a first storage device to a second storage device, without compression, and storing the set of audio tracks in ~~a~~the uncompressed format in the second storage device;

compressing the set of audio tracks transferred to and stored in the second storage device in ~~a~~the uncompressed format into ~~a~~the compressed format, ~~in the second storage device;~~

storing the set of audio tracks in ~~a~~the compressed format in the second storage device; and

upon receiving a request for an audio track to be played, retrieving the set of audio tracks in the compressed format and decompressing the set of audio tracks retrieved into signals in ~~a~~the uncompressed format suitable to be played to sound the audio track, wherein the compressing and the decompressing are performed according to a predetermined priority ~~including only compressing in which decompressing the set of audio tracks when there is no pending request for an audio track to be played, and not compressing and decompressing simultaneously~~ retrieved in the compressed format takes priority over compressing a set of audio tracks transferred in the uncompressed format from the first storage device.

Claim 23 (Cancelled).

24. (Currently Amended) The method of claim 22 comprising retrieving respective sets of audio tracks in ~~a~~the compressed format only after the respective set of audio tracks in ~~a~~the uncompressed format has been completely transferred to the

second storage device, wherein the compressing comprises compressing each set of audio tracks in ~~an~~the uncompressed format that ~~is~~ has been retrieved.

Claim 25 (Cancelled).

26. (Previously Presented) The method of claim 22 wherein the compressing comprises compressing the set of audio tracks to MP3 format.

27. (Currently Amended) The method of claim 24, wherein
the transferring of sets of audio tracks in ~~an~~the uncompressed format comprises storing more than one set of audio tracks in ~~an~~the uncompressed format in the second storage device, and

the retrieving of sets of audio tracks in ~~an~~the uncompressed format and the compressing of each set of audio tracks in ~~an~~the uncompressed format that is retrieved comprises retrieving one set of audio tracks at a time in ~~an~~the uncompressed format ~~at a time~~ and compressing one set of audio tracks at a time into ~~an uncompressed~~the compressed format ~~at a time~~.

28. (Currently Amended) A system for receiving sets of signals in an uncompressed format stored on a removable storage device, converting the sets of signals in ~~an~~the uncompressed format to sets of digital signals in a compressed format, and storing the sets of digital signals in ~~a~~the compressed format in at least one memory device, each respective set of signals in ~~an~~the uncompressed format and each set of digital signals in ~~a~~the compressed format representing a respective audio segment, the system comprising:

an input for connecting or reading a removable storage device and through which signals read from the removable storage device are received; and

a processor coupled to a memory device and the input, the processor being programmed to:

store in the memory device a set of signals in ~~an~~the uncompressed format supplied to the processor through the input,

retrieve from the memory device a set of signals in ~~an~~the uncompressed format from the memory device,

convert the set of signals in ~~an~~the uncompressed format that is retrieved into a set of digital signals in ~~a~~the compressed format,

store the set of digital signals in ~~a~~the compressed format in the memory device,

make available, for future storage, memory space in the memory device in which the set of signals in ~~an~~the uncompressed format ~~were~~ was stored, after that set of signals in ~~an~~the uncompressed format has been converted to the set of digital signals in ~~a~~the compressed format, and

retrieve a set of digital signals in ~~a~~the compressed format from the memory device and convert the set of digital signals in ~~a~~the compressed format that is retrieved into ~~an~~the uncompressed format suitable to be played to sound a corresponding audio segment, wherein the processor gives priority to converting a set of digital signals in ~~a~~the compressed format and retrieved from the memory device into a set of signals in ~~an~~the uncompressed format over converting a set of signals retrieved from the memory device in ~~an~~the uncompressed format ~~retrieved from the memory device~~ into a set of signals in ~~a~~the compressed format.

Claims 29-31 (Cancelled).

32. (Previously Presented) The system of claim 28 wherein the processor comprises a programmed digital signal processor.

33. (Previously Presented) The system of claim 28 wherein the processor comprises a programmed digital signal processor and a programmed controller.

34. (Currently Amended) The system of claim 28, wherein the memory device comprises a computer readable disk, and the processor is programmed to store sets of signals in ~~an~~the uncompressed format and sets of digital signals in ~~a~~the compressed format on the disk.

Claims 35-60 (Cancelled).

61. (Currently Amended) A method of archiving sets of audio signals comprising:

providing a memory device;

dynamically partitioning the memory device into

a first memory area for storing in the compressed format sets of audio signals,

a second memory area for storing in a compressed format sets of audio signals that have been compressed from an uncompressed set of audio signals and that are still stored in an uncompressed format in another memory area of the memory device,

a third memory area for storing, temporarily, in the uncompressed format the sets of audio signals stored in the compressed format in the second memory area, and

a fourth memory area which is a free area for storing sets of audio signals without regard to format;

under control of a processor, transferring to ~~a~~the memory device, from a removable storage device coupled to an input of the processor, a set of audio signals representing an audio segment, without conversion of the set of audio signals to a compressed format; and

only when the processor is not controlling accessing of an audio segment stored in the memory device, retrieving a set of the audio signals transferred to the memory device without conversion to ~~a~~the compressed format, converting the set of audio

signals retrieved into ~~a~~the compressed format~~-set~~, and storing the set of audio signals in the compressed format~~-set~~ in the second memory area of the memory device.

62. (Currently Amended) The method of claim 61 wherein converting the set of audio signals retrieved comprises converting at a rate in a range of from one to two times real time.

63. (Previously Presented) The method of claim 62 wherein the processor comprises a digital signal processor.

64. (Currently Amended) The method of claim 61 comprising erasing from the memory device the set of audio signals transferred to memory device without conversion to ~~a~~the compressed format, after conversion of the set of audio signals to the compressed format~~-set~~, and storing the set of audio signals in the compressed format~~-set~~ in the memory device, thereby making available, for future storage, memory space of the third memory area in the memory device in which the set of audio signals in the uncompressed format was stored, after that set of audio signals has been compressed into the compressed format, by transferring that memory space from the third memory area to the fourth memory area.

65. (New) The method of claim 5, wherein the second memory device is further partitioned into a fifth memory area as a buffer area, including temporarily storing a set of signals in the uncompressed format in the fifth memory area and retrieving the set of signals from the fifth memory area for reproduction and, simultaneously, compressing the set of signals into the compressed format.

66 (New) The method of claim 17, wherein the second storage device is further partitioned into a fifth memory area as a buffer area, including temporarily storing a set of digital signals in the uncompressed format in the fifth memory area

and retrieving the set of digital signals from the fifth memory area for reproduction and, simultaneously, compressing the set of digital signals into the compressed format.

67. (New) The method of claim 61, wherein the memory device is further divided into a fifth memory area as a buffer area, including temporarily storing a set of audio signals in the uncompressed format in the fifth memory area and retrieving the set of audio signals from the fifth memory area for reproduction and, simultaneously, compressing the set of audio signals into the compressed format.

68. (New) The method of claim 22, wherein the predetermined priority gives priority to the transferring over the compressing.

69. (New) The method of claim 22, wherein the predetermined priority includes

only compressing the set of audio tracks when there is no pending request for an audio track to be played, and
not compressing and decompressing simultaneously.

70. (New) The method of claim 28, wherein the predetermined priority includes

only converting a set of digital signals in the uncompressed format to the compressed format when there is no pending request for converting a set of digital signals into the uncompressed format suitable to be played, and
not compressing and decompressing simultaneously.